

Message

From: Ross, Mary [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=98359CD1F66F46EC91D327E99A3C6909-ROSS, MARY]
Sent: 10/26/2015 12:50:58 PM
To: ORD-NCEA [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9fd27be854b0475e8c7da44e626886aa-ORD-NCEA]
Subject: FW: ORD/OSA Weekly Report

Hello, here's the report submitted to the Administrator. For those interested in the SAB Advisory meeting on the hydrofracking report, here's the website:

<http://yosemite.epa.gov/sab/sabproduct.nsf/a84bfee16cc358ad85256ccd006b0b4b/26216d9fbba8784385257e4a00499ea0!OpenDocument&Date=2015-10-28>

From: Blackburn, Elizabeth
Sent: Sunday, October 25, 2015 3:37 PM
To: ORD-Mgmt-Council <ORDMgmtCouncil@epa.gov>; ORD-IOAA-Front Office Support <ORDIOAASUPPORT@epa.gov>; ORD-Exec-Council-Directors <Execcouncildirectors@usepa.onmicrosoft.com>
Subject: Fwd: ORD/OSA Weekly Report

Hello all

Please see Tom's note to the Administrator below. Thanks to many of you for including the impact of various efforts this week on your weekly notes.

Liz

Liz Blackburn
Chief of Staff
USEPA Office of Research and Development
202-564-2192
Cell Personal Matters / Ex. 6
Sent from my iPhone

Begin forwarded message:

From: "Burke, Thomas" <Burke.Thomas@epa.gov>
Date: October 25, 2015 at 12:12:58 PM EDT
To: "Adm13McCarthy, Gina" <Adm13McCarthy.Gina@epa.gov>, "Meiburg, Stan" <Meiburg.Stan@epa.gov>, "Purchia, Liz" <Purchia.Liz@epa.gov>, "Fritz, Matthew" <Fritz.Matthew@epa.gov>, "Vaught, Laura" <Vaught.Laura@epa.gov>, "Beauvais, Joel" <Beauvais.Joel@epa.gov>, "Garbow, Avi" <Garbow.Avi@epa.gov>, "Pieh, Luseni" <Pieh.Luseni@epa.gov>, "Rupp, Mark" <Rupp.Mark@epa.gov>, "Garvin, Shawn" <garvin.shawn@epa.gov>, "McCabe, Janet" <McCabe.Janet@epa.gov>
Cc: "Kadeli, Lek" <Kadeli.Lek@epa.gov>, "Kavlock, Robert" <Kavlock.Robert@epa.gov>, "Blackburn, Elizabeth" <Blackburn.Elizabeth@epa.gov>, "Deener, Kathleen" <Deener.Kathleen@epa.gov>, "Smith, Kelley" <Smith.Kelley@epa.gov>, "Hubbard, Carolyn" <Hubbard.Carolyn@epa.gov>, "Kim, Hyon" <Kim.Hyon@epa.gov>
Subject: ORD/OSA Weekly Report

Administrator,

I am pleased to submit our ORD/OSA weekly report. The week ahead will be a full one, with continued active involvement with scientific and communication support for Flint, Gold King, Bridgeton Landfill, mercury and fish consumption recommendations, and tire crumb playing fields. In addition, I look forward to participating in the meeting of our SAB Panel reviewing the *Draft Assessment of the Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources*. I will also be participating in a Congressional luncheon event and annual meeting of our EPA/NIEHS Children's Health Centers.

Flint, Michigan

We continue to be involved in the Flint, MI response. We reviewed the corrosion control plan for Flint's water supply and provided MDEQ with several recommendations related to corrosion control dose, monitoring and testing strategies and preparedness for future challenges. MDEQ is moving ahead with our recommendations and monitoring suggestions.

Region 7 Bridgeton Landfill

We are working with Region 7 on the Bridgeton Landfill subsurface smoldering event. The landfill is adjacent to the West Lake Superfund Site, which contains radiologically contaminated material. We are finalizing a report for the region reviewing and analyzing data from the Missouri DNR for gas quality and temperature trends in collected gas from gas extraction wells, gas interception wells, and temperature monitoring probes, and landfill surface elevation changes.

EPA/NIEHS Children's Environmental Health and Disease Prevention Centers: Congressional Event and Annual Meeting

EPA will join its partners from the National Institute of Environmental Health Sciences to highlight the remarkable achievements and ongoing research of their jointly-funded Children's Health Centers at two events next week. First, Representatives Renee L. Ellmers (R-NC) and G.K. Butterfield (D-NC) will host a congressional event on Wednesday, October 28: *A Healthy Start for Every Child: How the Environment Influences Health & Development*. The event will present information about

the newest research related to childhood diseases such as autism, asthma and obesity. I will join Linda Birnbaum to give remarks at the event. I will also give remarks at the EPA/NIEHS Children's Centers Annual Meeting will be held Thursday and Friday next week, October 29 and 30. We are working with OPA to prepare for potential questions from the public and the media on various issues, including tire crumb.

Environmental Health Summit

On October 26th and 27th, ORD will participate in the Environmental Health Summit in RTP. The theme is *Safe Water From Every Tap: Where does NC Stand 40 Years After the Safe Drinking Water Act*. The summit convenes community representatives, rural residents, private well owners, EJ justice advocates, municipal officials, public health practitioners and local health departments, state and federal agency representatives, water utilities, and industries to develop recommendations addressing new and old threats to North Carolina's private wells. The goal is to work toward an assurance of safe drinking water for all North Carolinians.

Science Advisory Board Review of Hydraulic Fracturing Assessment

On October 28-30, EPA's Science Advisory Board (SAB) will meet in Washington, DC to review the draft *Assessment of the Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources*.

Region 9 Aclima Media Demo and VERGE Conference

On October 28, Jared Blumenfeld and ORD's Dan Costa will participate in a media event in San Francisco hosted by Aclima, Inc., a California technology company. The event will highlight an air monitoring study by Aclima, Inc. and Google Inc. to monitor three metropolitan areas in California with mobile air monitoring equipment. Aclima is testing its mobile air sensor technology platform on Google Street View cars in San Francisco, Los Angeles and the Central Valley region and plans to map air pollution in these areas. EPA has a CRADA with Aclima to conduct research to advance air monitoring technology and is

providing scientific advice. We supported a pilot study in 2014 in Denver by Aclima and Google and the results are being applied to the new studies in CA. Dan Costa will also participate with Aclima and Google in a panel discussion on Oct. 29 at the VERGE 2015 conference in San Jose, Calif. VERGE is a GreenBiz Group international conference focusing on technologies and systems that accelerate sustainability solutions across sectors in a climate-constrained world.

Louisville Biodigester Community Meeting

OCIR has requested ORD to attend the Louisville Biodigester Community Meeting on October 29 to discuss biodigestion technology. R4 representatives will attend to address EJ issues. The meeting will be held in West Louisville, where Star BioEnergy is proposing to build an anaerobic biodigester, which would get at least 70% of its materials from the adjacent Heaven Hill Bernheim Distillery, supplemented by food waste. Last September, in response to questions raised about the proposed biodigester, Louisville Mayor Greg Fischer called for a 60-day period in which citizens and city leaders could better educate themselves about the science and technology proposed.

Three Days of STEM Outreach

On October 27th, five ORD scientists will teach 60+ middle school students about air quality and climate change at Umstead State Park in Raleigh, North Carolina. Through interactive, hands-on activities the students will be able to learn about the ability of trees to store carbon, build particle sensors, and understand the impacts of climate change.

On October 28th, EPA-RTP's STEM Outreach Program will participate in two Durham Public School Career Fairs. Five scientists will share their educational and career experiences in environmental science at Northern and Jordan High Schools, two of Durham's largest schools with a combined population of more than 3,500 students. This offers a great opportunity for EPA to inspire the next generation to consider careers in STEM and environmental science.

On October 29th, EPA-RTP's STEM Outreach Program will lead hands-on activities for 120 8th graders at Mills Park Middle School to teach the students about the importance of soil.

International Conference on Neural Tube Defects

Next week ORD will attend the 9th International Conference on Neural Tube Defects to present an overview of EPA's Virtual Tissues research. ORD's attendance will allow for dissemination of, and feedback on work using cutting edge computational models to predict birth defects from world class researchers who have a common goal of preventing neural tube defects such as spinal bifida.

Last Week

ORD Presents Research Supporting Radiological Cleanup

ORD presented research results at the International Conference on Thermal Treatment Technologies & Hazardous Waste Combustors in Houston October 20-22. In the event of a wide-area radiological contamination incident (e.g., dirty bomb, nuclear power accident), significant quantities of biomass (vegetation such as tree, shrubs, grass) may be contaminated with cesium and other nucleotides as was the case in Fukushima. Biomass combustion has the potential to minimize the volume of waste to be managed; however, cesium in combustion systems tends to vaporize and later condense into very small particles that are not effectively caught in particulate control devices. The work has demonstrated cesium capture efficiencies greater than 65%.

Biosand filters in Patillas, Puerto Rico

As part of a Region 2 RARE Project ORD, R2 and InterAmerican University installed four biosand filters last week in Apeadero in Patillas, Puerto Rico. Out of 247 small, Puerto Rican rural communities without access to drinking water from a water utility, only 186 communities use some form of chlorination, and very few use filtration technologies that remove chlorine resistant pathogens. Due to high costs of electricity to pump water, several Puerto Rican rural communities have abandoned groundwater sources and reverted to unfiltered surface water,

creating serious public health risks and non-compliance. In 2016, EPA plans to install solar panels to transfer and treat surface water. The R2 RARE project will provide the concept for a sustainable water supply using solar power, providing clean and safe drinking water, helping with EJ concerns, and reducing fossil fuel use.

Hispanic Engineers National Achievement Awards Conference STEM Career Fair

ORD and R9 attended the HENAAC (formerly Hispanic Engineers National Achievement Awards Conference) STEM career fair in Pasadena, CA on Saturday, October 17. The career fair was well attended by students from across the country, and by numerous government and private sector employers. The students who stopped by the EPA table showed a high level of interest in working with EPA, and particularly in summer positions and internships.

ORD Embassy Science Fellow talks about Climate Change in Australia

ORD scientist Rachelle Duvall, currently detailing as an Embassy Science Fellow, was invited to be a guest scientist at Questacon-The National Science and Technology Centre in Canberra, Australia on October 13th, 2015. She presented hands-on science activities to over 200 visitors. A guest appearance was made by former Prime Minister of Australia, John Howard, who “gave it a go” and participated in the activities. Duvall also gave a public seminar on climate change.

Publications

ORD Co-authored Article Selected for Society’s Annual Award

An article written by ORD’s Elizabeth D. Hilborn of the and R. Val Beasley of the University of Pennsylvania and published in the journal *Toxins* in April has been selected as the second-place winner of the 2015 Award for Outstanding Research Article in Biosurveillance in the “Impact of Field of Biosurveillance” category by the International Society for Disease Surveillance. “One Health and Cyanobacteria in Freshwater Systems: Animal Illnesses and Deaths Are Sentinel Events for

Human Health Risks” highlights the utility of using cyanobacteria-associated animal illnesses and deaths to provide early warnings of the potential for increased human health risks from harmful algal blooms.